

WHAT IS CLAIMED IS:

1. A device for drying products, such as in particular sludge originating from plants for the treatment of municipal or industrial wastewater, employing solar energy produced in the form of a greenhouse (1) comprising a slab or floor (2) on which the bed (3) of sludge to be dried is deposited, means (4) being provided for ensuring that the sludge spread over said floor is turned over and that it is progressed along the drying device, the latter additionally comprising fans to provide for the renewal of the air present in said greenhouse, characterized in that said fans (6) are positioned over the means (4) which ensure that the bed of sludge is turned over and progressed.
2. The device as claimed in claim 1, characterized in that it additionally comprises a system for sucking up and forcing back the air (8) positioned in the top part of the greenhouse (1).
3. The device as claimed in either of claims 1 and 2, characterized in that it comprises an additional system for ventilation via the ground (10, 9, 11) installed in the second half of the route followed by the sludge in the device.
4. The device as claimed in claim 3, characterized in that said additional system for ventilation via the ground comprises a fan (10) which blows air into a pipe (9) which emerges through the slab (2) via a geotextile membrane (11).
5. The device as claimed in any one of the preceding claims, characterized in that it comprises means for correlating the operation, that is to say the

start up and shut down, and the automatic control of all the motorized components with measurement of the temperature of the surface of the bed of sludge (3).

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6. The device as claimed in claim 5, characterized in that said correlation means also take into account the difference in temperature between the surface of the bed of sludge to be dried and the atmosphere present in the drying plant, the equipment only being started up when this temperature difference reaches a predetermined set point.

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7. The device as claimed in either of claims 5 and 6, characterized in that the relative humidity content of the atmosphere outside the drying greenhouse is measured and a set value for starting up is laid down when this humidity is less than a predetermined set point.

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8. The device as claimed in any one of claims 5 to 7, characterized in that the measurements of temperature difference and of relative humidity of the external atmosphere are coupled so that the first of these two values which reaches a predetermined set point triggers the start up of the equipment.

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9. The device as claimed in any one of the preceding claims, characterized in that it comprises a system for feeding the sludge via a metering pump (12) and distribution means (13) which makes it possible to disperse and to deposit the sludge in a uniform layer over the entire width of the greenhouse.

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10. The device as claimed in any of the preceding claims, characterized in that it additionally

comprises a heating system, in particular radiant panels or pipes, which makes it possible to heat the upper surface of the bed of sludge by infrared radiation.